



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599

[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

## NOTICE OF ACCEPTANCE (NOA)

Metal Tech, Inc.  
7635 West 2<sup>nd</sup> Court  
Hialeah, FL 33014

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

### DESCRIPTION: Aluminum Hinged Colonial Shutter

**APPROVAL DOCUMENT:** Drawing No. 280002, titled "Maximum Impact Colonial Shutter", sheets 1 through 6 of 6, prepared by Ramms Engineering, Inc., dated May 09, 2008, signed and sealed by Robert S. Monsour, P.E., on July 30, 2008, bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved", and NOA number, per TAS-201, TAS-202, and TAS-203, unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 08-0520.09 and consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.



*Helmy A. Makar*  
08/08/2013

NOA No. 13-0710.03  
Expiration Date: 09/04/2018  
Approval Date: 08/08/2013  
Page 1

**Metal Tech, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 08-0520.09**

**A. DRAWINGS**

1. *Drawing No. 280002, titled "Maximum Impact Colonial Shutter", sheets 1 through 6 of 6, prepared by Ramms Engineering, Inc., dated May 09, 2008, signed and sealed by Robert S. Monsour, P.E.*

**B. TESTS**

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test, and Uniform Static Air Pressure Test of colonial shutters, prepared by American Test Lab of South Florida, Report No. 0907.01-07, dated December 04, 2007, signed and sealed by William R. Mehner, P.E. and Henry Hattem, P.E.*

**C. CALCULATIONS**

1. *Anchor analysis dated 07/24/2008, 6 Pages, prepared by Ramms Engineering, Inc., signed and sealed by Robert S. Monsour, P.E.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Building Code Compliance Office.*

**E. MATERIAL CERTIFICATIONS**

1. *None.*

**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *None.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. QUALITY ASSURANCE**

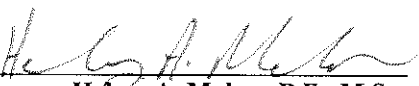
1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

**E. MATERIAL CERTIFICATIONS**

1. *None.*

**F. STATEMENTS**

1. *FBC, 2010 Edition compliance letter issued by Ramms Engineering, Inc., dated June 25, 2013, signed and sealed by Robert S. Mansour, P.E.*

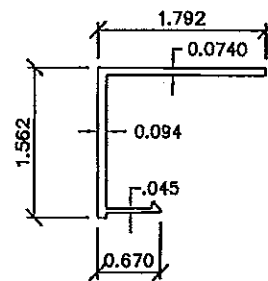
  
\_\_\_\_\_  
**Helmy A. Makar, P.E., M.S.**  
**Product Control Unit Supervisor**  
**NOA No. 13-0710.03**  
**Expiration Date: 09/04/2018**  
**Approval Date: 08/08/2013**



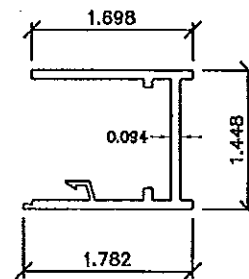
# METALTECH, INC.

## MAXIMUM IMPACT

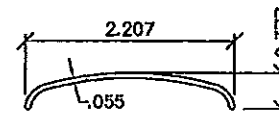
### DURAWELD COLONIAL SHUTTER



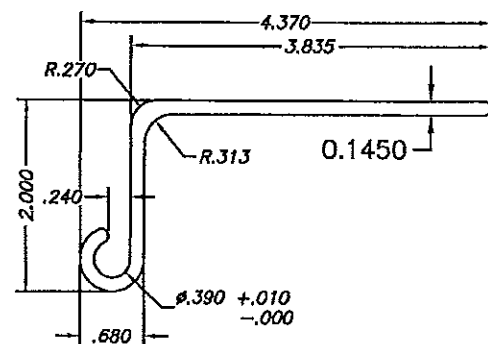
① SNAP CAP



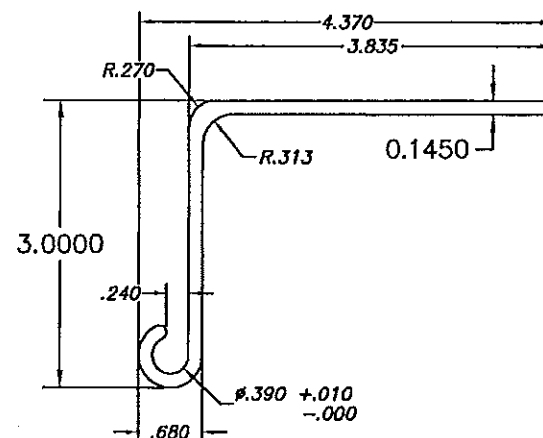
② OUTER FRAME



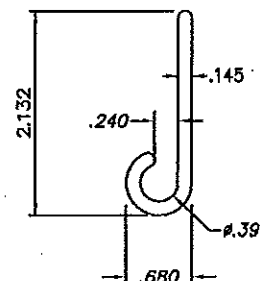
③ BLADE



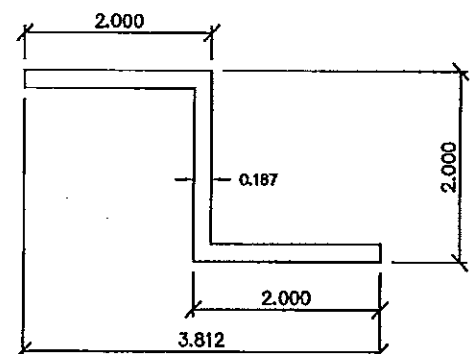
④ FEMALE HINGE  
3" IN LENGTH



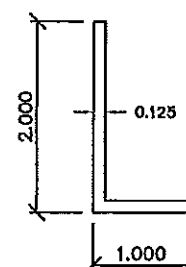
⑤ B/O FEMALE HINGE  
3" IN LENGTH



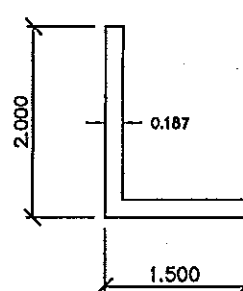
⑥ MALE HINGE  
3" IN LENGTH



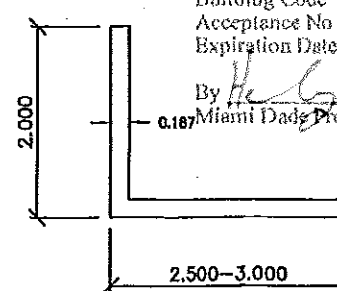
⑦ TIE DOWN Z BRACKET  
ALTERNATE TO ⑨ 4" IN LENGTH



⑧ CORNER KEY



⑨ TIE DOWN ANGLE BRACKETS  
4" IN LENGTH



⑩ TIE BACK BULLETS  
AND CLIPS

#### NOTES:

#### HIGH VELOCITY HURRICANE ZONE

THIS METAL TECH COLONIAL SHUTTER COMPLIES WITH THE FLORIDA BUILDING CODE

FBC CERTIFIED TESTING IN ACCORDANCE WITH TAS 201-94 AND 202-94 AND 203-94 PROTOCOLS.

MINIMUM DESIGN LOADS CALCULATIONS PERFORMED PER ASCE 7 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"

ALL ALUMINUM EXTRUSIONS TO BE ALLOY 6063-T6

BACKING SHALL BE .093 THICK POLYCARBONATE SECURED WITH #64 or #68 S.S. POPRIVETS 11" O.C. MAX.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT HINGES SHALL BE WITH 1/4" MASONRY SCREWS WITH 1 1/4" MINIMUM EMBEDMENT.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT BRACKETS SHALL BE 1/4-20 MACHINE SCREW ANCHOR WITH 7/8" MINIMUM EMBEDMENT OR FEMALE PANELMATE WITH 1/4-20 M/S (FLOOR PLUG) WITH 1 1/4" MINIMUM EMBEDMENT OR 1/4" MALE PANELMATE WITH 1/4-20 WASHERED WINGNUTS WITH 1 1/4" MINIMUM EMBEDMENT.

ANCHORAGE OF SHUTTER TO WOOD AT HINGES SHALL BE 1/4" WOOD LAGS WITH 1" MIN. EMBEDMENT OR 1/4" MASONRY SCREWS WITH 1 7/8" MINIMUM EMBEDMENT

ANCHORAGE OF SHUTTER TO WOOD AT BRACKETS SHALL BE 1/4" MALE PANELMATES WITH 1/4-20 WASHERED WINGNUTS OR 1/4" FEMALE PANELMATE WITH 1/4-20 M.S. (FLOOR PLUG) WITH 1 7/8" MINIMUM EMBEDMENT.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE TO ENSURE PROPER ANCHORAGE.

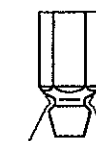
EACH COLONIAL SHUTTER SHALL BEAR PERMANENT LABEL SHOWING METAL TECH, INC. HIALEAH, FL - MIAMI DADE COUNTY PRODUCT CONTROL APPROVED

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. 13-0710-03  
Expiration Date 09/04/2018  
By *Heinz A. Meier*  
Miami Dade Product Control

Approved as complying with the  
Florida Building Code  
Date 09/04/2008  
NOAH 08-0520-09  
Miami Dade Product Control  
Division  
By *Heinz A. Meier*



SMALL



LARGE

*Monson*  
1/20/08

ROBERT S. MONSOUR, PE  
11955  
RAMMS ENGINEERING, INC.

REVISIONS	BY

RAMMS ENGINEERING, INC.  
*Structural Design*  
2100 W. 76th STREET, SUITE 311  
HALEAH, FLORIDA 33016  
TELEPHONE: 305-822-3141  
11955  
EB 0006024

MAXIMUM IMPACT COLONIAL SHUTTER  
**METALTECH, INC.**  
7835 W. SECOND CT. HIALEAH, FL 33014  
EST. 1957

SEP / RSM
05/03/2008
SHOWN
280002
1
6

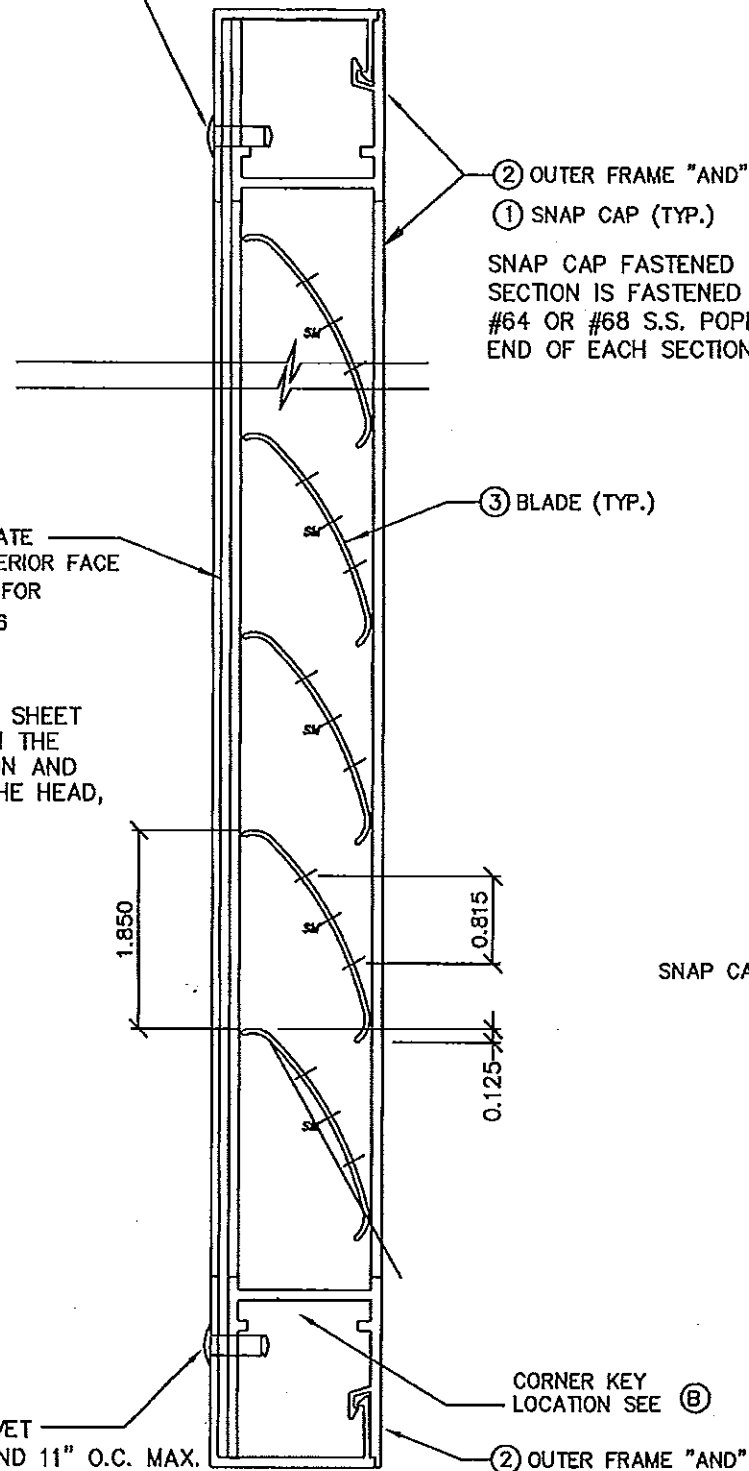
HIGH VELOCITY HURRICANE ZONE

#64 or #68 S.S. POPRIVET  
4 1/2" IN FROM END AND 11" O.C. MAX.  
AROUND PERIMETER OF EACH SECTION  
OF POLYCARBONATE (TYP.)

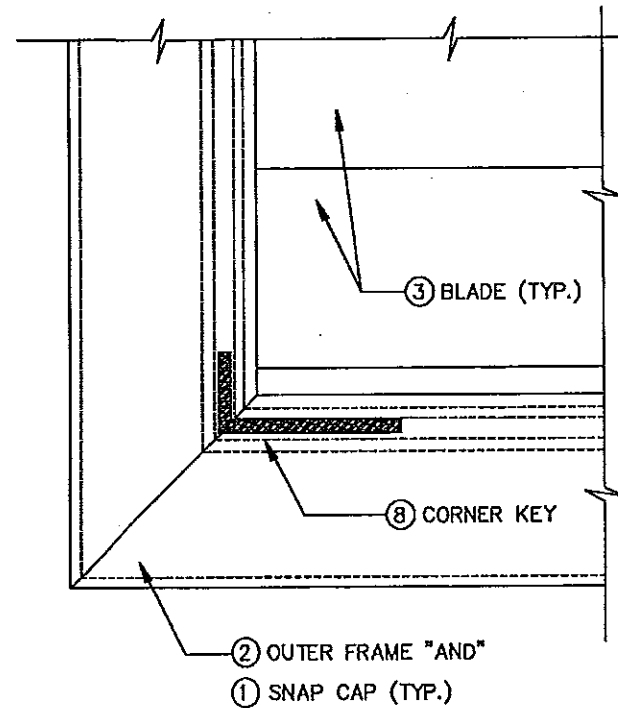
.093 THICK POLYCARBONATE  
BACKING (TYP.) ON EXTERIOR FACE  
OF EACH PANEL EXCEPT FOR  
DETAIL "K" SHEET 5 OF 6

THE POLYCARBONATE SHEET  
IS INSERTED BETWEEN THE  
OUTER FRAME SECTION AND  
THE SNAP CAP AT THE HEAD,  
JAMBS, AND SILL.

#64 or #68 S.S. POPRIVET  
4 1/2" IN FROM END AND 11" O.C. MAX.  
AROUND PERIMETER OF EACH SECTION  
OF POLYCARBONATE (TYP.)



(A) TYPICAL CROSS SECTION ASSEMBLY

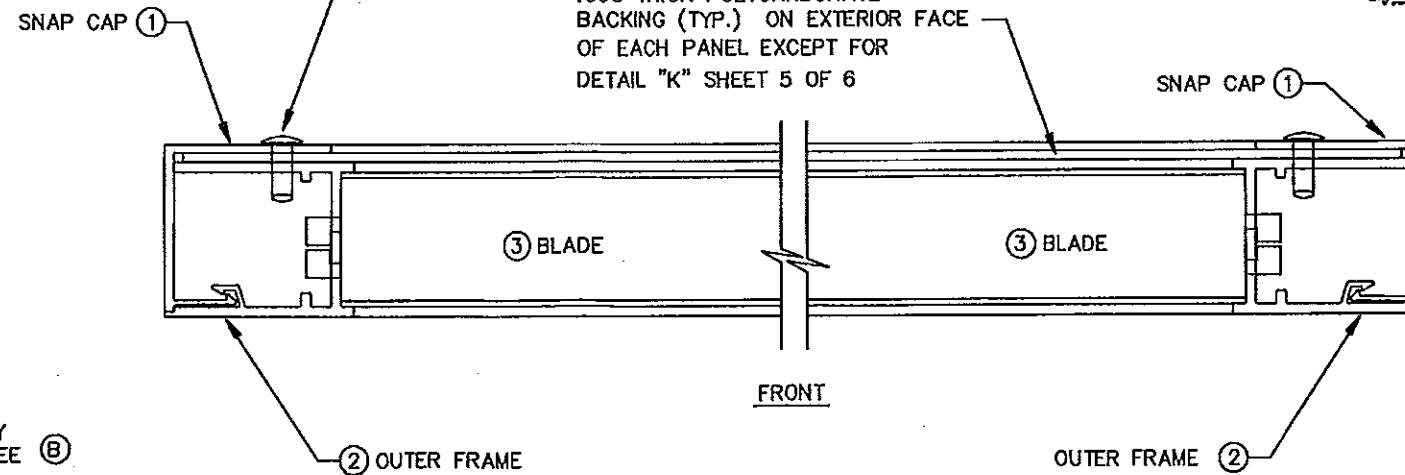


(B) CORNER KEY DETAIL ELEV.

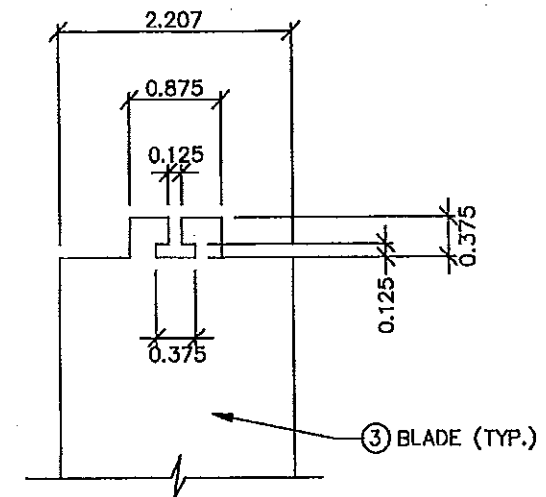
SILL AND HEADER ATTACHED TO EACH JAMB  
WITH CORNER KEY TACK WELDED TO SILL, JAMBS  
AND HEADER. EACH MITER CORNER CUT IS  
WELDED.

#64 or #68 S.S. POPRIVET  
4 1/2" IN FROM END AND 11" O.C. MAX.  
AROUND PERIMETER OF EACH SECTION  
OF POLYCARBONATE (TYP.)

.093 THICK POLYCARBONATE  
BACKING (TYP.) ON EXTERIOR FACE  
OF EACH PANEL EXCEPT FOR  
DETAIL "K" SHEET 5 OF 6



(D) PLAN VIEW CROSS SECTION



(C) BLADE PUNCH DETAIL

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. 13-0710.03  
Expiration Date 09/04/2018  
By *Heather A. Miller*  
Miami Dade Product Control

Approved as complying with 2009  
Florida Building Code  
Date 09/04/2008  
NOA# 08-0520.09  
Miami Dade Product Control  
Division  
By *Heather A. Miller*

*Monsour*  
1/30/08  
ROBERT S. MONSOUR, PE  
11955  
RAMMS ENGINEERING, INC.

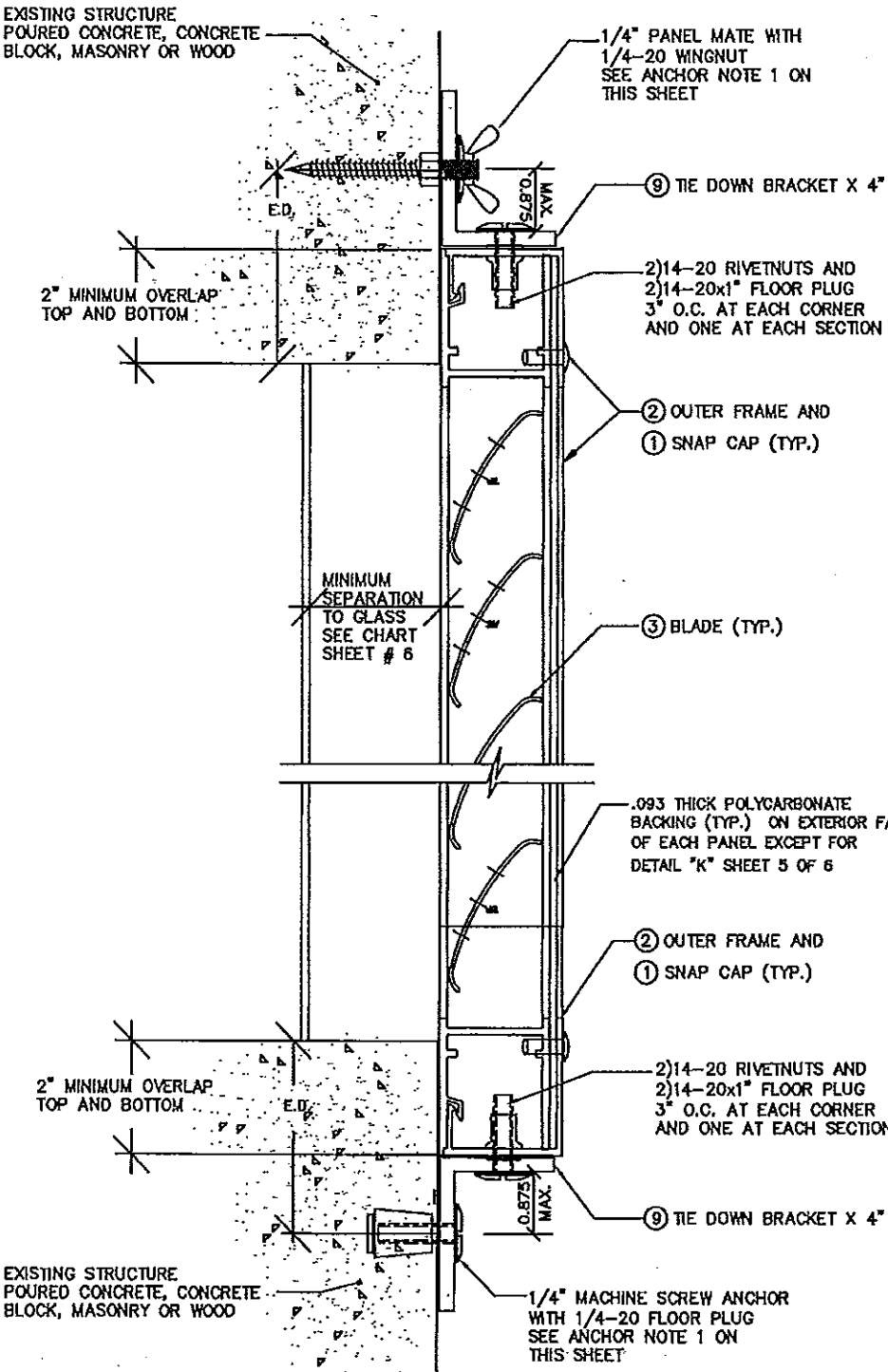
REVISIONS	BY

RAMMS ENGINEERING, INC.  
*Structural Design*  
2100 W. 78th STREET, SUITE 311  
HIALEAH, FLORIDA 33016  
TELEPHONE: 305-822-3141  
11955  
EB 0006024

**METALTECH, INC.**  
EST. 1957  
7635 W. SECOND CT. HIALEAH, FL 33014  
REGISTERED WORLD-WIDE

DATE	SEP / RSM
REVISED	
DATE	05/09/2008
REASON	SHOWN
REV	280002
REV	
	2
	6

HIGH VELOCITY HURRICANE ZONE



E WALL MOUNT CROSS SECTION  
HURRICANE POSITION

ANCHOR NOTE 1:

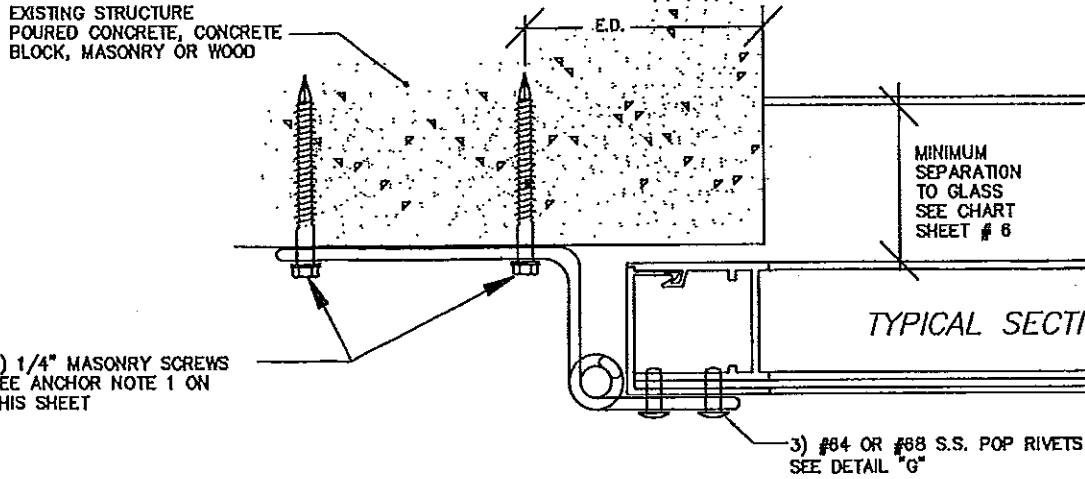
ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT WALL HINGES SHALL BE WITH 1/4" MASONRY SCREWS WITH 1 1/4" MINIMUM EMBEDMENT.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT BRACKETS SHALL BE 1/4-20 MACHINE SCREW ANCHOR OR FEMALE PANELMATE WITH 1/4-20 M/S (FLOOR PLUG) OR 1/4" MALE PANELMATE WITH 1/4-20 WASHERED WINGNUTS

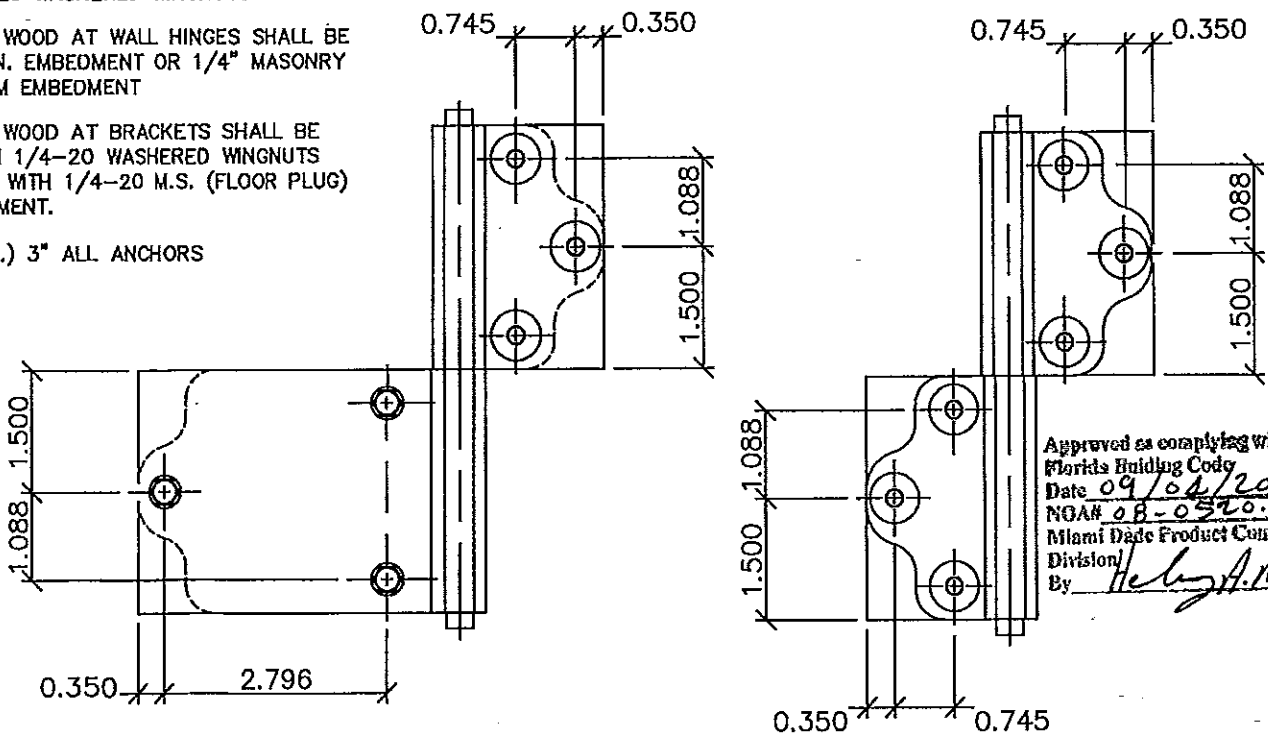
ANCHORAGE OF SHUTTER TO WOOD AT WALL HINGES SHALL BE 1/4" WOOD LAGS WITH 1" MIN. EMBEDMENT OR 1/4" MASONRY SCREWS WITH 1 7/8" MINIMUM EMBEDMENT

ANCHORAGE OF SHUTTER TO WOOD AT BRACKETS SHALL BE 1/4" MALE PANELMATES WITH 1/4-20 WASHERED WINGNUTS OR 1/4" FEMALE PANELMATE WITH 1/4-20 M.S. (FLOOR PLUG) WITH 1 7/8" MINIMUM EMBEDMENT.

MINIMUM EDGE DISTANCE (E.D.) 3" ALL ANCHORS



F WALL MOUNT CROSS SECTION  
HURRICANE POSITION



G WALL AND SECTION HINGES  
ANCHOR AND RIVET LOCATION

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No 13-0710-03  
Expiration Date 09/04/2018  
By *Healy A. Miller*  
Miami Dade Product Control

Approved as complying with the  
Florida Building Code  
Date 09/04/2008  
NOAH 08-0520-09  
Miami Dade Product Control  
Division  
By *Healy A. Miller*

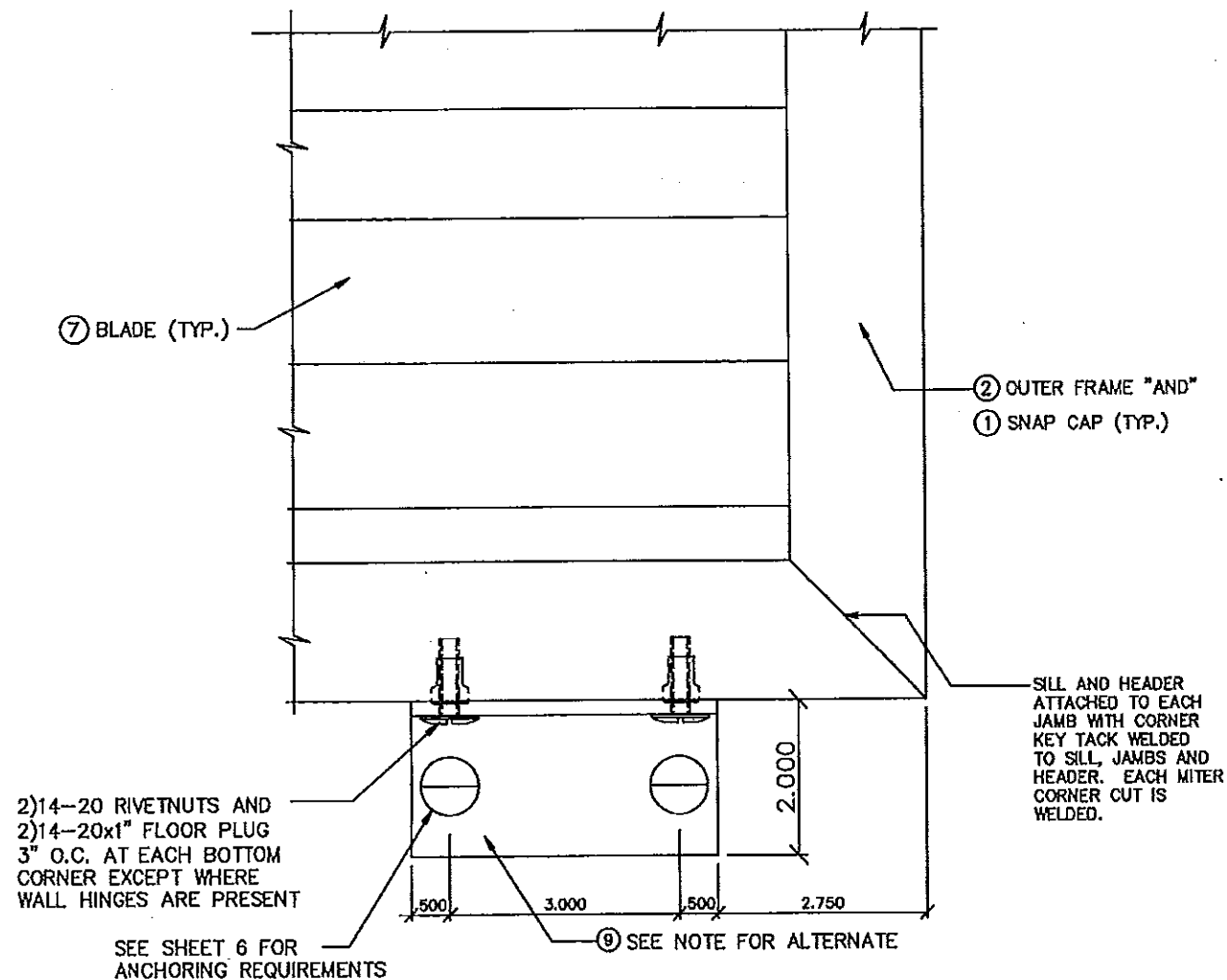
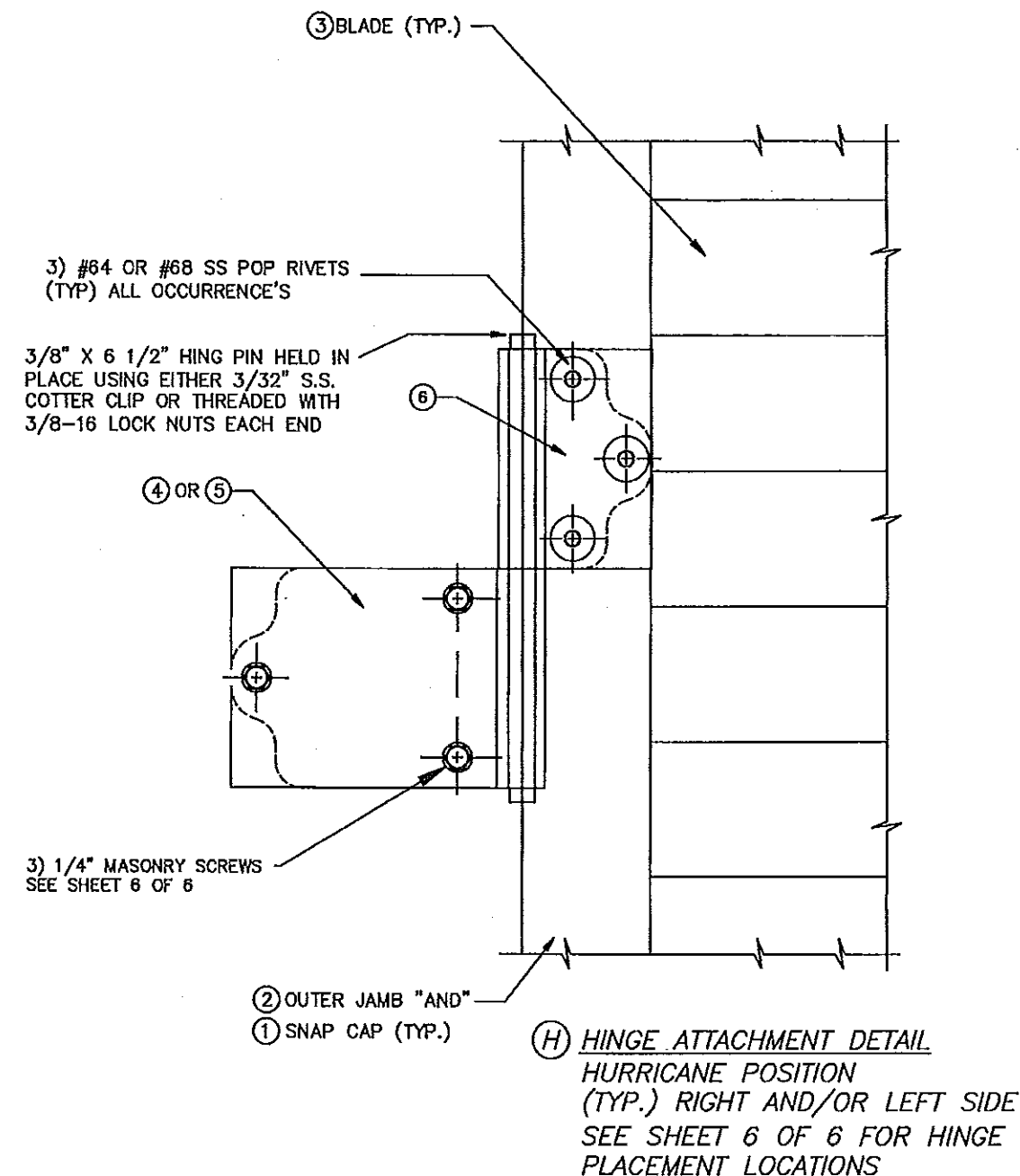
*Monsour*  
7/30/08  
ROBERT S. MONSOUR, PE  
11955  
RAMS ENGINEERING, INC.

REVISIONS	BY

RAMS ENGINEERING, INC.  
*Structural Design*  
2100 W. 76th STREET, SUITE 311  
HIALEAH, FLORIDA 33016  
11955  
EB 0006024  
TELEPHONE: 305-822-3141

**METALTECH, INC.**  
EST. 1957  
7835 W. SECOND CT. HIALEAH, FL 33014  
GLOBE  
EST. 1957

SEP / RSM
05/09/2008
FILE SHOWN
2800002
3
6



NOTE:

WHEN #7 TIE DOWN Z BRACKET IS USED AS AN ALTERNATIVE TO #9 TIE DOWN BRACKETS, THE Z BRACKET IS NOT REQUIRED TO BE ATTACHED TO THE SHUTTER. THE Z BRACKET ONLY NEEDS TO BE ANCHORED TO THE WALL.

Approved as complying with the  
Florida Building Code  
Date 09/04/2008  
NOAH 08-0520-09  
Miami Dade Product Control  
Division  
By *Helmy A. Miller*

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No 13-0710-03  
Expiration Date 09/04/2018  
By *Helmy A. Miller*  
Miami Dade Product Control

*Monsour*  
ROBERT S. MONSOUR, PE  
11955  
RAMMS ENGINEERING, INC.

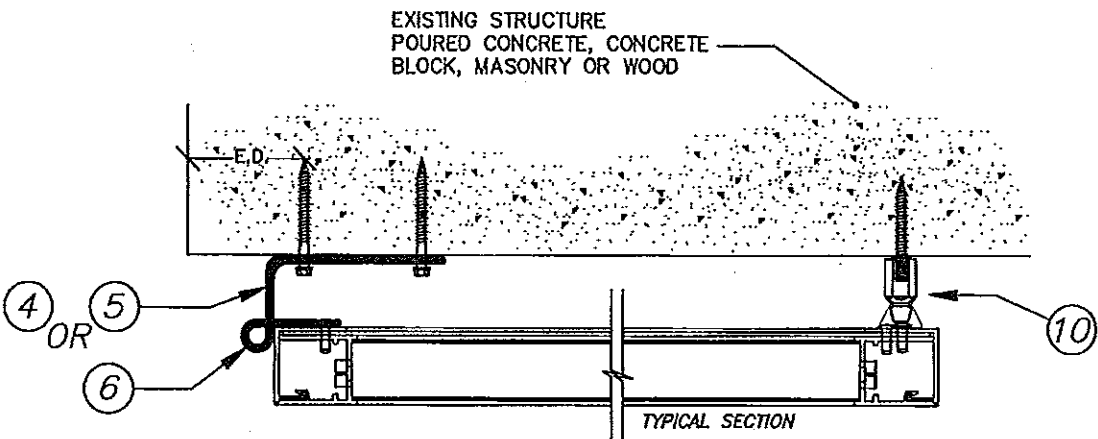
REVISIONS	BY

RAMMS ENGINEERING, INC.  
*Ramms Design*  
2100 W. 78th STREET, SUITE 311  
HALEAH, FLORIDA 33016  
TELEPHONE: 305-822-3141  
11955  
EB 0006024

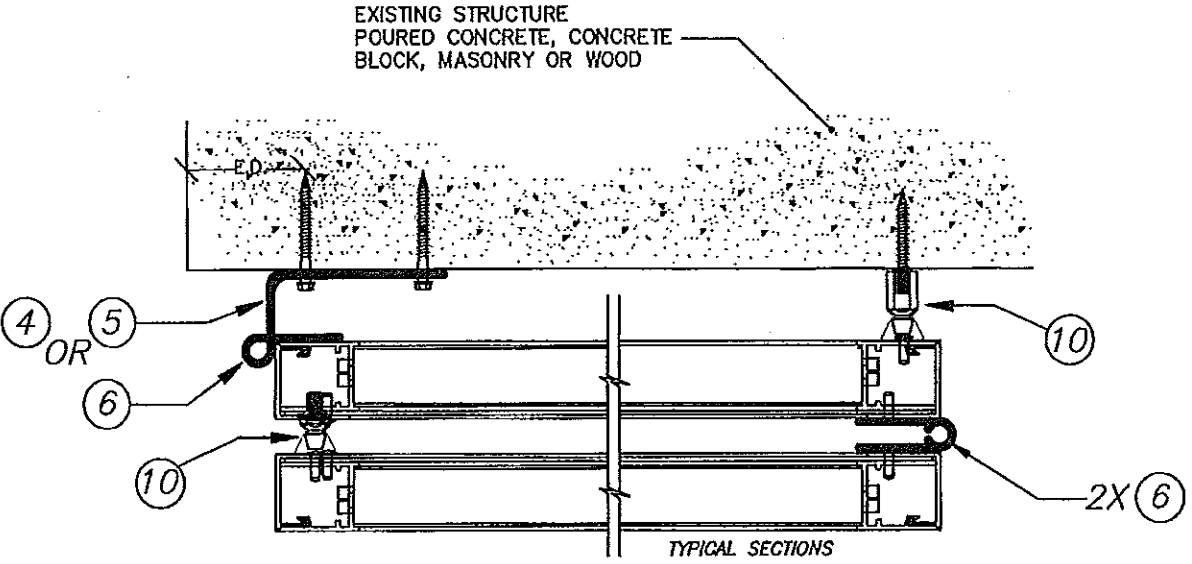
**METALTECH, INC.**  
7835 W. SECOND CT. HALEAH, FL 33014  
EST. 1957  
EXPERIENCED WORLDWIDE

SEP / RSM
DATE
05/09/2008
REVISIONS
280002
4
6

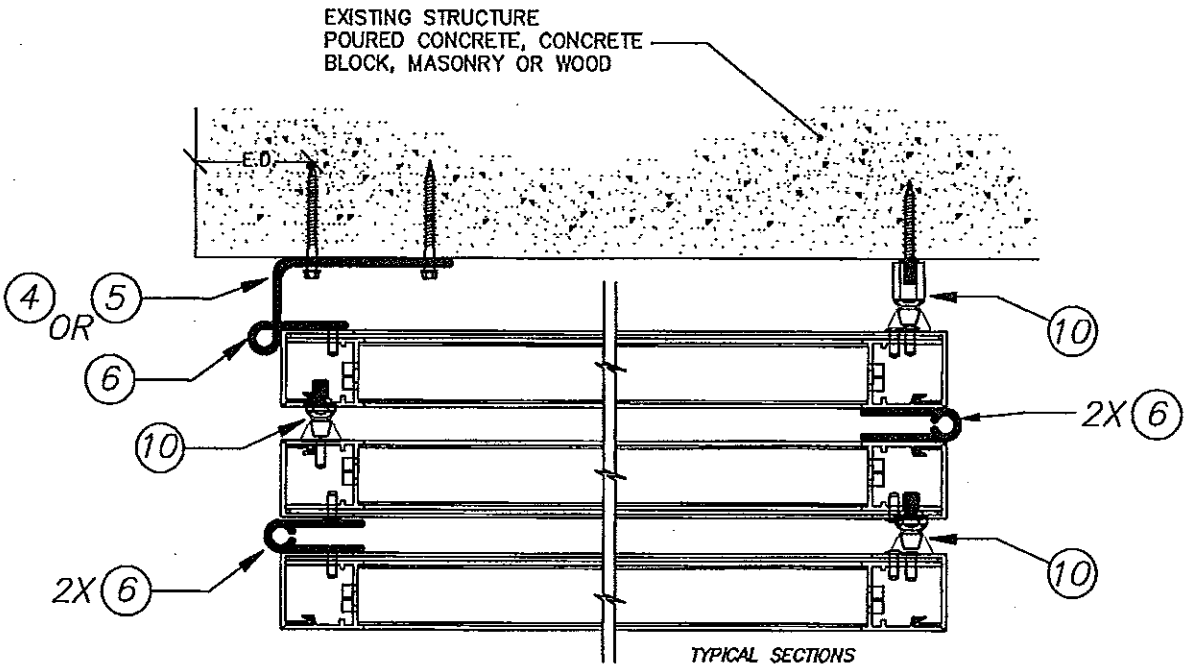
PLAN VIEW STACKING CONFIGURATIONS



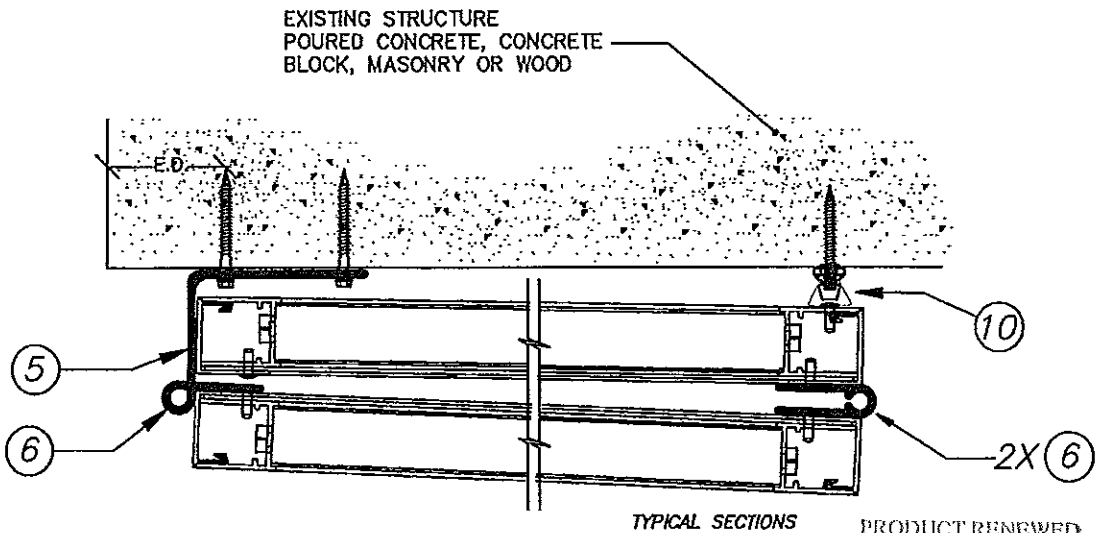
J SINGLE SECTION  
NON HURRICANE POSITION  
(TYP.) RIGHT AND/OR LEFT SIDE



K DOUBLE SECTION  
NON HURRICANE POSITION  
(TYP.) RIGHT AND/OR LEFT SIDE  
THIS DETAIL HAS A 3 9/16" SEPERATION TO GLASS



L TRIPLE SECTION  
NON HURRICANE POSITION  
(TYP.) RIGHT AND/OR LEFT SIDE



M DOUBLE SECTION ALTERNATE  
NON HURRICANE POSITION  
(TYP.) RIGHT AND/OR LEFT SIDE

NOTE:  
SEE SHEET 3 AND 6 OF 6 FOR ANCHOR  
LOCATIONS AND REQUIREMENTS

Approved as complying with the  
Florida Building Code  
Date 09/04/2008  
NOA# 08-0520-09  
Miami Dade Product Control  
Division  
By *[Signature]*

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No 13-0719-03  
Expiration Date 09/04/2018  
By *[Signature]*  
Miami Dade Product Control

ROBERT S. MONSOUR, PE  
11955  
RAMMS ENGINEERING, INC.

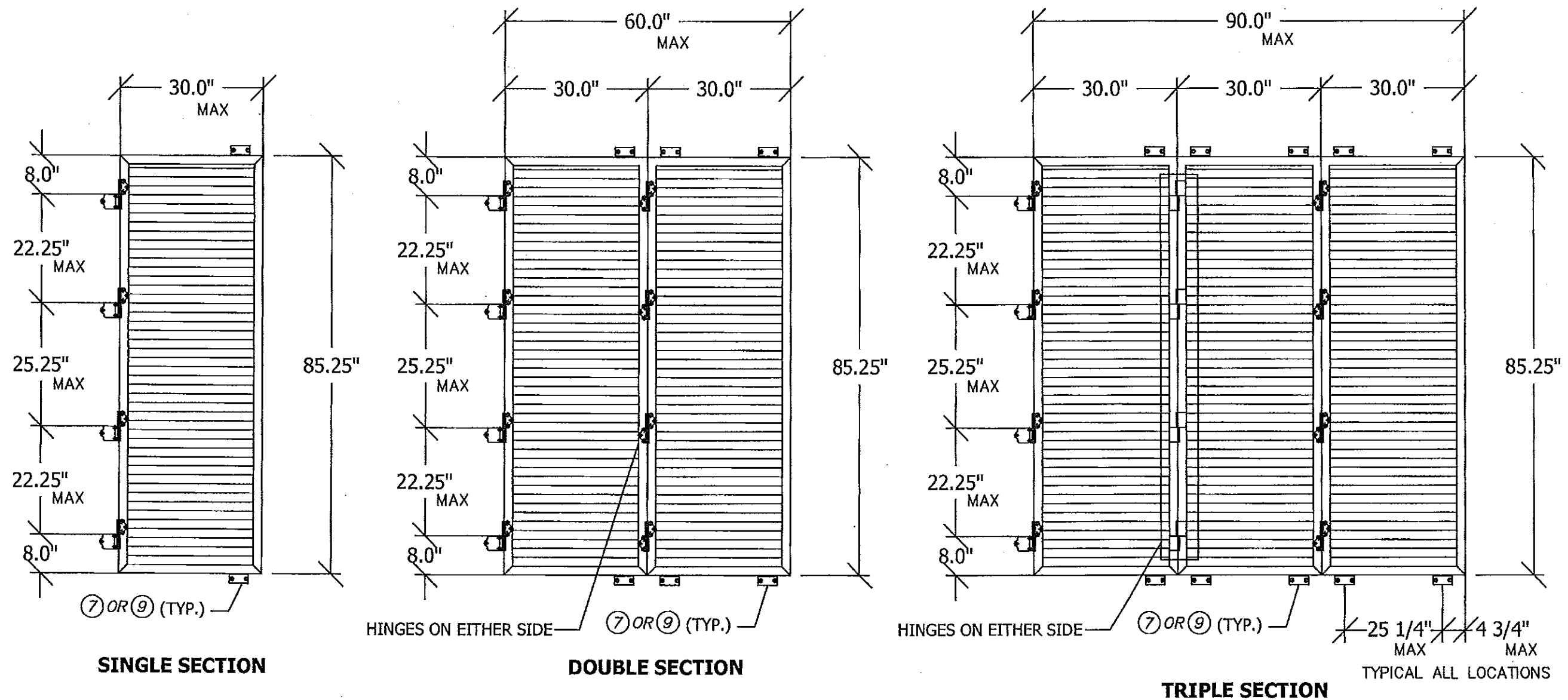
REVISIONS	BY

RAMMS ENGINEERING, INC.  
*Structural Design*  
2100 W. 78th STREET, SUITE 311  
HALEAH, FLORIDA 33016  
TELEPHONE: 305-822-3141  
11955  
EB 0008024

METALTECH, INC.  
7835 W. SECOND CT. HIALEAH, FL 33014  
EST. 1957  
EST. 1957

SEP / RSM  
10/18/2008  
SHOWN  
280002  
5  
6

# HURRICANE POSITION ELEVATION VIEWS AND LIMITATIONS



SINGLE SECTION

DOUBLE SECTION

TRIPLE SECTION

DETAIL "J, L AND M" SHEET 5 OF 6

DESIGN RATING PRESSURE IN P.S.F.	MAXIMUM SECTION WIDTH	MAXIMUM HEIGHT	MINIMUM SEPARATION TO GLASS
+57.0,-71.8	30"	85 1/4"	2 7/8"

DETAIL "K" SHEET 5 OF 6

DESIGN RATING PRESSURE IN P.S.F.	MAXIMUM SECTION WIDTH	MAXIMUM HEIGHT	MINIMUM SEPARATION TO GLASS
+57.0,-71.8	30"	85 1/4"	3 9/16"

SEE SHEET 4 OF 6 FOR BRACKET SPECIFICATIONS

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT WALL HINGES SHALL BE WITH 1/4" MASONRY SCREWS WITH 1 1/4" MINIMUM EMBEDMENT.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT BRACKETS SHALL BE 1/4"-20 MACHINE SCREW ANCHOR OR FEMALE PANELMATE WITH 1/4"-20 M/S (FLOOR PLUG) OR 1/4" MALE PANELMATE WITH 1/4"-20 WASHERED WINGNUTS

ANCHORAGE OF SHUTTER TO WOOD AT WALL HINGES SHALL BE 1/4" WOOD LAGS WITH 1" MIN. EMBEDMENT OR 1/4" MASONRY SCREWS WITH 1 7/8" MINIMUM EMBEDMENT

ANCHORAGE OF SHUTTER TO WOOD AT BRACKETS SHALL BE 1/4" MALE PANELMATES WITH 1/4"-20 WASHERED WINGNUTS OR 1/4" FEMALE PANELMATE WITH 1/4"-20 M.S. (FLOOR PLUG) WITH 1 7/8" MINIMUM EMBEDMENT.

MINIMUM EDGE DISTANCE (E.D.) 3" ALL ANCHORS

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. 13-0710.03  
Expiration Date 09/04/2018  
By *Robert S. Monsour*  
Miami Dade Product Control

Approved as complying with the  
Florida Building Code  
Date 09/04/2008  
NOAH 08-0520.09  
Miami Dade Product Control  
Division  
By *Robert S. Monsour*

ROBERT S. MONSOUR, PE  
11955  
RAMMS ENGINEERING, INC.

REVISIONS	BY

RAMMS ENGINEERING, INC.

Structural Design

2100 W. 76th STREET, SUITE 311  
HALEAH, FLORIDA 33016

11955  
EB 0006024

METALTECH, INC.

7635 W. SECOND CT. HALEAH, FL 33014



EST. 1957

SEP / RSM
05/09/2008
SHOWN
280002
6